

PERTRONIC INDUSTRIES LTD

FAAST LT Conventional Interface V1.11

Installation Note



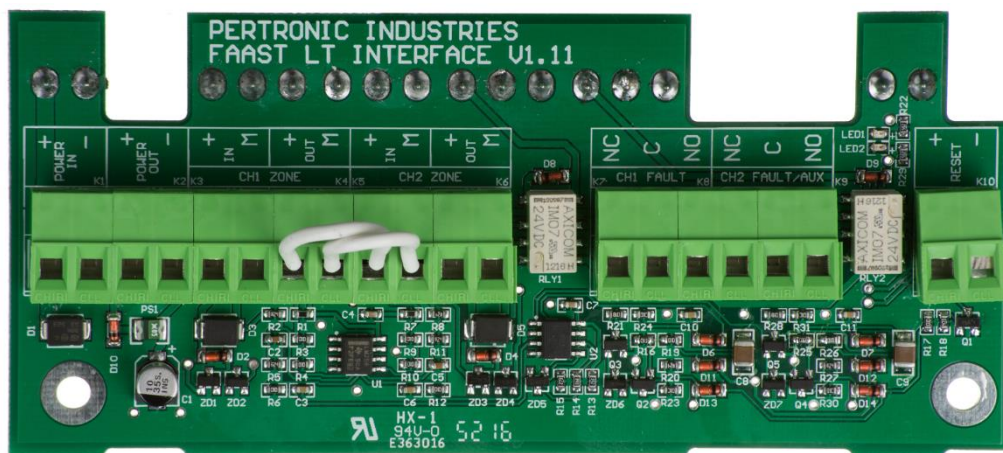
Overview

The FAAST LT conventional interface allows stand-alone FAAST units to be directly connected to the zone circuits of a **Pertronic Loop Responder, F16e** or **F4** conventional panel.

Both alarm and defect conditions are signaled by the interface on the conventional zone circuit and detector reset on the zone is translated by the interface into a reset condition for the FAAST LT device.

The **Stand-alone FAAST LT Interface** operates from 24Vdc, sourced from either the Panel supply or from an independent power supply – this may be isolated or non-isolated (application dependent).

The **Stand-alone FAAST LT Interface** complies with NZS 4512:2010.



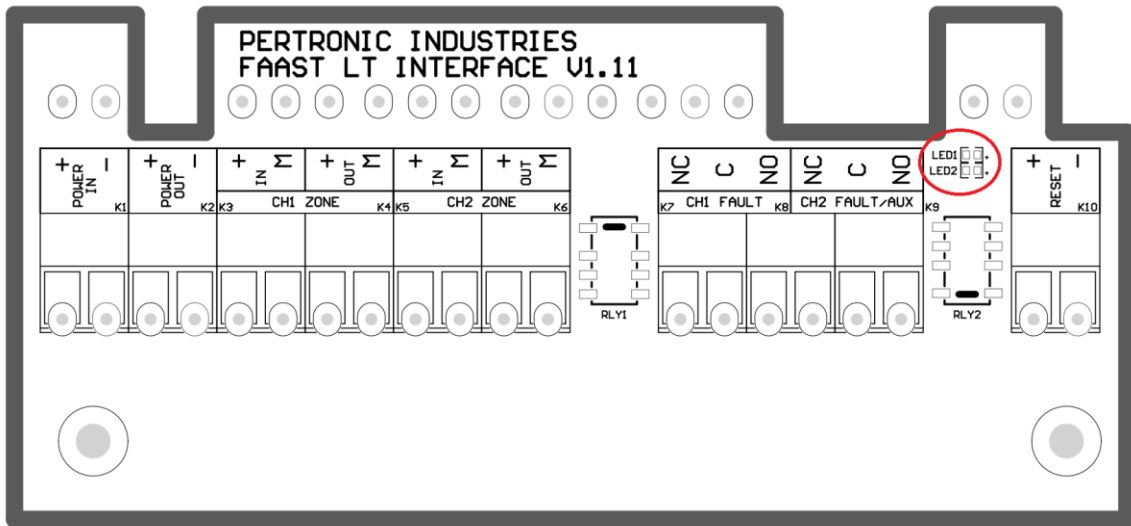
Features

- Fits inside **Stand-alone FAAST LT Detector** (Models FL0111E, FL0112E, FL0122E).
- Connection: conventional zone circuit and power supply.
- Connects to Pertronic 20V conventional zone circuits.
- Up to 4 interfaces (8 channels total) may be connected to a single conventional zone
- Powered from isolated or non-isolated 24Vdc power supply
 - F16e - powered from panel supply
 - F4 or Loop responder - powered from an independent, isolated power supply
- Uses 'Smoke' and 'Defect' regions for 'Off-Normal' indication.
- The **Stand-alone FAAST LT Detector** automatically resets when the conventional zone is reset.
- Provides Form C 'Defect' contacts: NC, COM, NO for external signaling.
- When using two-channel units on separate conventional circuits, zone interface wiring must be connected to the same conventional circuit device (e.g. the same Loop Responder).

Specification

Dimensions:	126 x 56	L x W (mm)
Supply Voltage:	19 to 30Vdc	
Supply Current at 27.4V: (excludes FAAST LT)	Normal/Alarm: 28mA Single channel Defect: 19mA Both channels Defect: 10mA	
Maximum Power Supply Through-Current		2A
Note: limit the supply current feed with a 1A in-line fuse, or similar.		
Maximum Number of FAAST LT channels per Zone Circuit		8
Relay Contact Rating:		1A @ 24Vdc

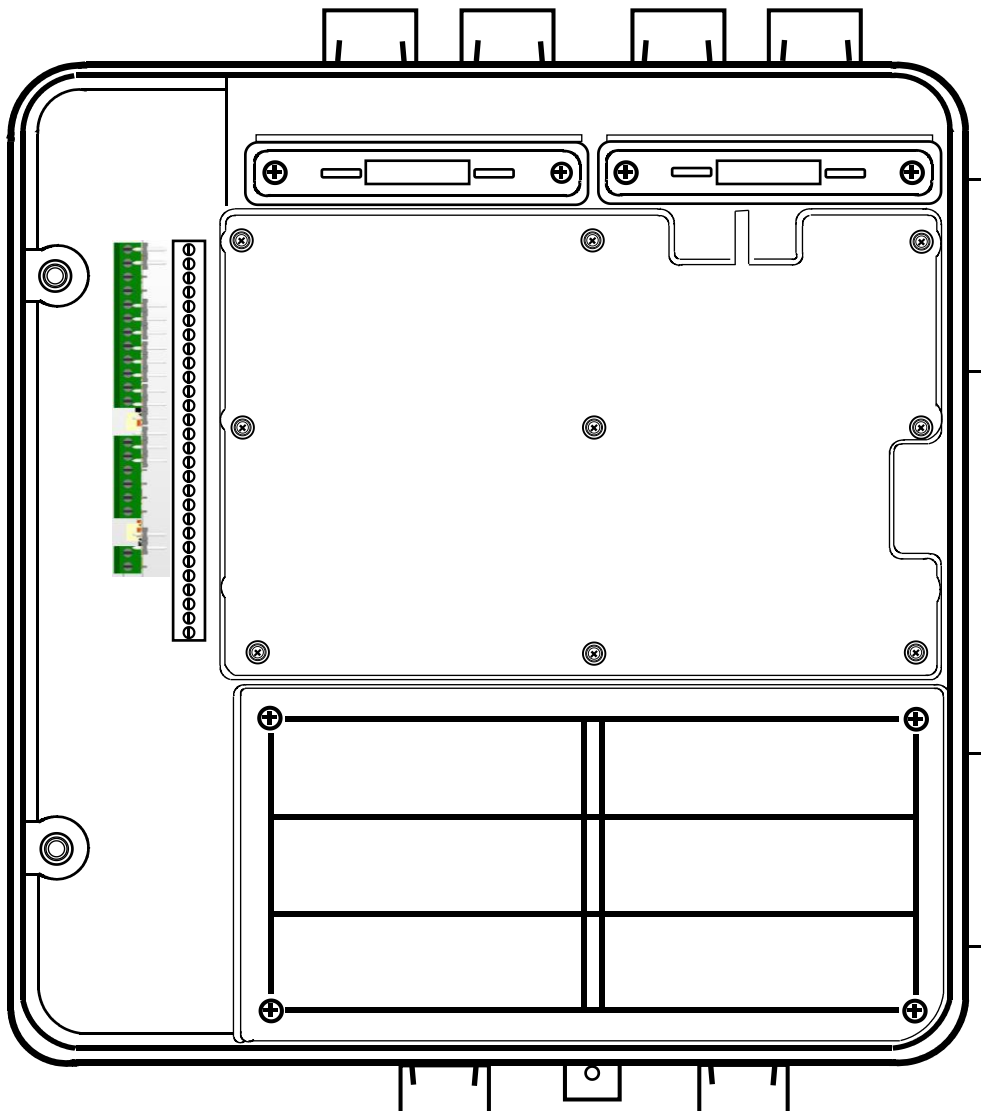
Board Layout



Note: LED1 is reset LED for Channel 1, LED2 is reset LED for Channel 2.

Module Location Diagram

The diagram below shows the location of the interface module within the FAAST unit.



Installation and Commissioning

Installation

Before installation:

- Determine which version Stand-alone FFAST LT unit is being connected and the required connection option (See diagrams below for options)
 - o Single Channel FFAST LT connected to single conventional zone
 - o Dual Channel FFAST LT connected to single conventional zone
 - o Dual Channel FFAST LT connected to two conventional zones

Note: Defects are signalled by the interface on the conventional zone circuits and the majority of installations will not use the CH1 / CH2 Fault outputs provided by the interface

- Identify the Power Supply and Zone cables, but ensure they are not connected at this time.
- Do not fit the Interface board inside the Stand-alone FFAST LT Detector at this time.
- Ensure Dual Channel FFAST LT connected to two conventional zones are on the same conventional circuit device (e.g. same Loop Responder)

Wiring:

- Feed the Power and Zone Circuit wiring through the appropriate cable entry knock-outs
- Connect the Power and Zone cabling as shown below, observing correct polarity.

Installing the Interface

- Mount the Interface board inside the Stand-alone FFAST LT unit.
 - o Ensure that all the edge connector plugs supplied with the FFAST LT unit have been installed
 - o Loosen all connector terminals that need to accept a connection pin from the interface
 - o Insert the interface pins into the edge connector terminal then tighten all terminals (16).
 - o Ensure all terminals are tightened

Connection to Power

- Connect power from the Panel or suitable power supply to the Power Input connector.
- The Power Out connection can be used to feed power to additional units—**this should be limited to a maximum of 3 additional units.**

Connection to the Conventional Circuit

- Connect the Zone wiring to the conventional circuit, observing correct polarity – do not power the FFAST LT detector ON.
- confirm that the Conventional Zone displays a Defect – High (approximately 6V)
 - o M-voltage = 4.2V to 7.1V - for F4 or F16e reference panel 0V
 - o M-voltage = 4.5V to 8.0V - for Loop Responder reference Loop negative.
- A short circuit defect indicates that the zone wiring may have been connected with reverse polarity (M-Voltage = 18.5V to 20V).

Set up

- Apply power to the FFAST LT unit

See Stand-alone FFAST LT Quick installation Guide for further information.

Commissioning

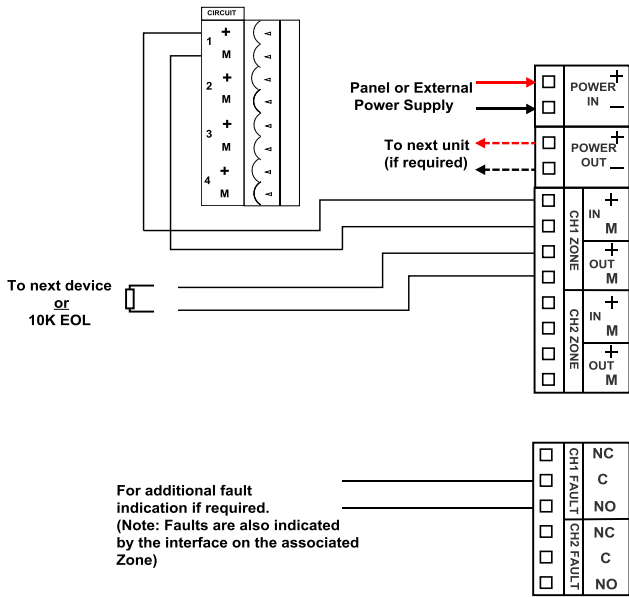
Ensure the Stand-alone FFAST LT unit is 'normal'

(Refer to the FFAST LT Installation manual for set-up details)

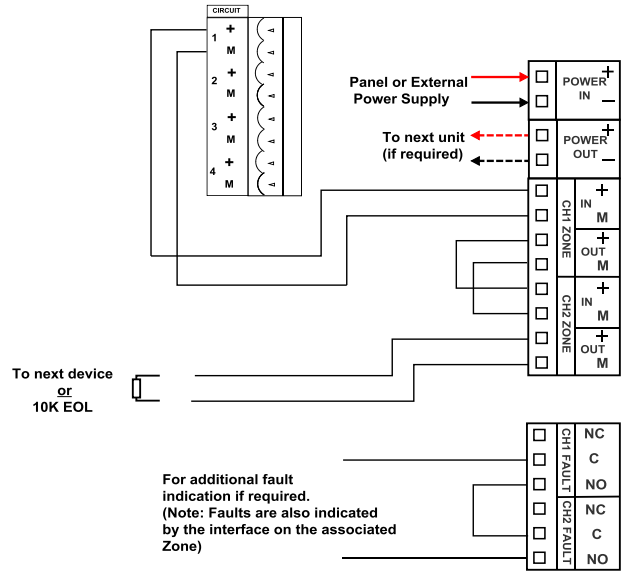
Note: the FFAST LT door must be closed (or the door switch held down if the door must be open for testing).

- Verify the response at the panel:
 - o **Normal** Panel indicate "Normal"
 - o **Alarm** Generate an Alarm—Magnet Test or Test Smoke. Check panel indicates Alarm
 - o **Fault / Defect** Simulate a Fault condition—block the outlet pipe to generate a fault.
- FFAST LT Alarms are reset by the conventional zone when it is reset. (Red LED on interface will briefly flash ON while panel zone reset is active).

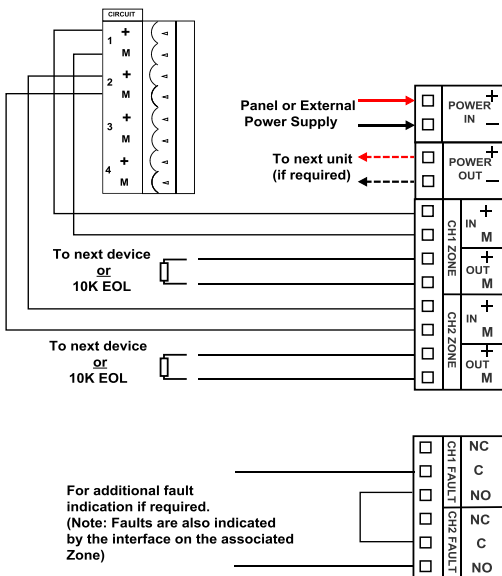
Interface connection



Single channel connected to one zone



Dual channel connected to one zone



Dual channel connected to two zones

Applicable Stand-Alone FAAST LT devices

- FL0122E Stand Alone Dual Channel Detector
- FL0112E Stand Alone Single Channel Dual Detector
- FL0111E Stand Alone Single Channel Detector

Product Codes:

Product Code	Description
FAASTLTIF	Stand-alone FAAST LT Interface

Technical Support:

Phone: (04) 567-3229, Ext 2 or email: tech@pertronic.co.nz